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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/593,236	12/22/2006	Morio Suehiro	129246	7346

25944 7590 12/15/2009

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EXAMINER	
MAESTRI, PATRICK J	
ART UNIT	PAPER NUMBER
3633	
MAIL DATE	DELIVERY MODE
12/15/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/593,236	SUEHIRO ET AL.	
	Examiner	Art Unit	
	PATRICK MAESTRI	3633	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 July 2009*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) _____ is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *22 July 2009* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *20090522*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This office action is in response to the amendment dated July 22, 2009. The amendments to the Specification, Claims and Drawings have been accepted. Currently claims 1-18 are pending in the application.

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the second anchor bolt having a shorter length in the embedded concrete (Claims 6 and 11, lines 2-3) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

2. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner,

the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 2, 4, 7, 12, 14, and 17 are objected to under 35 U.S.C. 112, second paragraph.

Claim 2 recites the limitation "the planar configuration" in line 2. There is insufficient antecedent basis for this limitation in the claim.

5. Claim 4 recites the limitation "the adhesive" in line 2. There is insufficient antecedent basis for this limitation in the claim.

6. Claim 7 recites the limitation "the concrete frame" in line 2. There is insufficient antecedent basis for this limitation in the claim. It should be “a concrete frame”

7. Claim 12 recites the limitation "the adhesive" in line 2. There is insufficient antecedent basis for this limitation in the claim.

8. Claim 14 recites the limitation "the concrete frame" in line 2. There is insufficient antecedent basis for this limitation in the claim. It should be "a concrete frame"

9. Claim 17 recites the limitation "the adhesive" in lines 2 and 3. There is insufficient antecedent basis for this limitation in the claim.

10. Claims 10, 11, and 14 are objected to because of the following informalities: Claim 10, line 2 recites "of both" and would read better as just "both". Claim 11, line 2 should be "larger" instead of "large". Claim 14 is unclear as to what "the end side" is. Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5, 7-10, 13-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Holdredge (US Patent No 1,500,870).

Referring to claim 1: Holdredge teaches a composite anchor comprising: a first anchor bolt installed projecting outside of a concrete frame (figure 1, items 6 and 1); and a second anchor bolt that is eccentrically positioned to the axis of the first

anchor bolt (figure 1, item 4); and a connecting part for connecting the first and the second anchor bolts (figure 1, item 1), wherein the connecting part extends radially from the first anchor bolt to and past the second anchor bolt (figure 1), the second anchor bolt being located in a radial center of the connecting part, thereby reducing the bending moment which is exerted locally on the connecting part due to a load on the first anchor bolt (figure 1).

Referring to claim 2: Holdredge teaches all the limitations of claim 1 as noted above. Additionally, Holdredge teaches the planar configuration of the connecting part is made to be a polygonal or circular shape, thereby increasing the compressive force transfer area of the projecting portion (figure 2).

Referring to claim 3: Holdredge teaches all the limitations of claim 1 as noted above. Additionally, Holdredge teaches the connecting part is formed to have top and bottom surfaces of a polygonal or circular shape, and the second anchor bolt is positioned at the center of the connecting part (figure 2).

Referring to claim 5: Holdredge teaches all the limitations of claim 1 as noted above. Additionally, Holdredge teaches both of the first anchor bolt and the second anchor bolt are formed with the same or different diameters (figure 1).

Referring to claim 7: Holdredge teaches a composite anchor bolt comprising: a first anchor bolt installed projecting outside of the concrete frame (figure 1, items 6 and 1); a second anchor bolt which is eccentrically positioned to the axis of the first anchor bolt (figure 1, item 4); and a connecting part for connecting the first and the second anchor bolts, wherein the center of the connecting part and the axis of the second anchor bolt are coaxial (figure 1), and a planar configuration of the connecting part is formed in a polygonal or circular shape, and the first anchor bolt is positioned toward a radial edge of the connecting part (figure 2).

Referring to claim 8: Holdredge teaches all the limitations of claim 7 as noted above. Additionally, Holdredge teaches the planar configuration of the connecting part is made either a circular, triangular, quadrangular, or polygonal configuration to increase the adhesive area of the composite anchor bolt (figure 2).

Referring to claim 9: Holdredge teaches all the limitations of claim 7 as noted above. Additionally, Holdredge teaches a reinforcing portion is formed at a joining point between the second anchor bolt and the connecting part to compensate for a bending moment which is exerted locally on the joining point (figure1, item 2).

Referring to claim 10: Holdredge teaches all the limitations of claim 7 as noted above. Additionally, Holdredge teaches both the first anchor bolt and the second anchor bolt are formed with the same or different diameters (figure 1).

Referring to claim 13: Holdredge teaches all the limitations of claim 7 as noted above. Additionally, Holdredge teaches at least one of the first anchor bolt and second anchor bolt is removably attachable to said the connecting part (figure 1, item 4 is threaded).

Referring to claim 14: Holdredge teaches A composite anchor bolt comprising: a first anchor bolt installed projecting outside of the concrete frame (figure 1, items 6 and 1); a second anchor bolt which is eccentrically positioned to the axis of the first anchor bolt (figure 1, item 4); and a connecting part for connecting the first and the second anchor bolts, wherein the connecting part and second anchor bolt are formed together in a T-shape configuration, and the first anchor bolt is placed at the end side of the connecting part (figure 1, item 1).

Referring to claim 15: Holdredge teaches all the limitations or claim 14 as noted above. Additionally, Holdredge teaches at least one of the first anchor bolt and second anchor bolt is removably attachable to said the connecting part (figure 1, item 4 is threaded).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holdredge in view of Kubler et al. (US Patent No 6,604,899) ("Kubler").

Referring to claims 4 and 12: Holdredge teaches all the limitations of claims 1 and 7 as noted above. Holdredge does not teach the connecting part has an injection hole for the adhesive and an air hole. However, Kubler teaches an adhesive and air hole in an anchor bolt (figure 1).

It would have been obvious to someone with ordinary skill in the art at the time of the invention to combine the anchor bolt as taught by Holdredge with the air and adhesive holes as taught by Kubler in order to add adhesive to the connection and completely seal out any moisture that could penetrate the connection and cause a crack in the concrete.

5. Claims 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Holdredge.

Referring to claims 6 and 11: Holdredge teaches all the limitations of claims 1 and 7 as noted above. Additionally, Holdredge teaches the second anchor bolt has a larger diameter that the first anchor bolt (figure 1). Holdredge does not specifically teach the second anchor bolt is formed with a shorter length in the embedded concrete.

However, It would have been obvious to someone with ordinary skill in the art at the time of the invention to create the second anchor bolt to any length, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237, (CCPA 1955). It would have been obvious to make the bolt shorter in order to decrease the depth of the hole needed, thereby decreasing work time.

6. Claims 16 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suehiro (US Patent No 7,475,518) in view of Holdredge.

Referring to claim 16: Suehiro teaches a method of installing a composite anchor bolt comprising: preparing a composite anchor bolt including a first anchor bolt and a second anchor bolt positioned eccentrically in a direction perpendicular to each other, with a planar connecting part connecting the first and second anchor bolts, the first anchor bolt projecting on the outside of a matrix in which the composite anchor bolt is embedded and a second anchor bolt positioned eccentrically to the first anchor bolt relative to the planar connecting part projecting inside the matrix; removing a cylindrical or polygonal core from the reinforcement covering margin to confirm the position of the reinforcement within the matrix, when reinforcement is encountered in the anchor borehole position, the core corresponding to the shape of the connecting part, and surrounding the borehole; drilling a borehole for said-the second anchor bolt; and

jointly attaching the composite anchor bolt (claim 1). Suehiro does not teach the connecting part extends radially from the first anchor bolt to and past the second anchor bolt. However, Holdredge teaches the connecting part extends radially from the first anchor bolt to and past the second anchor bolt (figure 1, item 1).

It would have been obvious to someone with ordinary skill in the art at the time of the invention to combine the method as taught by Suehiro with the characteristic of having the connecting part extend past the second anchor bolt as taught by Holdredge in order to allow the first anchor bolt to be positioned on either side of the second anchor bolt and still be within the connector plate.

Referring to claim 18: Suehiro and Holdredge teach all the limitations of claim 16 as noted above. Additionally, Holdredge teaches a base placed on the connecting part and is attached with the first anchor bolt (figure 1). Neither Suehiro nor Holdredge teach the connecting part projecting from the concrete. However, it would have been obvious to someone with ordinary skill in the art at the time of the invention to place the connecting part at whatever height that is desired in order to provide the optimal connection for whatever is being connected to the part.

7. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Suehiro in view of Holdredge in view of Kubler.

Referring to claim 17: Suehiro and Holdredge teach all the limitations of claim 16 as noted above. They do not teach after the second anchor bolt is set into the drilled borehole, the adhesive is injected into an adhesive injection hole which is formed in the connecting part, air is released from an air hole which is formed in the connecting part, and the composite anchor bolt is attached. However, Kubler teaches a fastener with air and adhesive holes for injection of adhesive after the fastener is placed in the hole.

It would have been obvious to someone with ordinary skill in the art at the time of the invention to combine the method of installing an anchor as taught by Suehiro and Holdredge with the step of placing adhesive in the hole through the injection hole as taught by Kubler in order to allow complete sealing of the hole without excess adhesive.

Response to Arguments

8. Applicant's arguments with respect to claims 1-18 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to PATRICK MAESTRI whose telephone number is (571)270-7859. The examiner can normally be reached on 9am-4pm Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Chilcot can be reached on 571-272-6777. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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